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WASHINGTON, D.C. 20460
OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

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Emergency Exemption Review

DATE: June 9, 2003

SUBJECT: Myclobutanil (Rally 40W) on Peppers in California
Rohm and Hass Company/Dow AgroSciences

FROM: Thuy Nguyen, MS, Chemist
Kevin Costello, Risk Assessment Process Leader Kevin Costello 6/6/03
ERB III / Environmental Fate and Effects Division (7507C)

THRU: Ben Smith, Branch Chief 6/9/03
ERB III / Environmental Fate and Effects Division (7507C)

TO: Robert Forrest, Product Manager
Barbara Madden, PM Team Reviewer
Registration Division (7505C)

Summary of Conclusions

The EFED/ERB III has completed reviewing the emergency exemption request for the use of myclobutanil on peppers to control powdery mildew in California. The EFED concludes that this use should not pose significant adverse effects to birds, fish, small mammals, and aquatic invertebrates, including endangered species. Risks to terrestrial plants and non-target insects could not be assessed due to lack of adequate data; therefore, risks to these species groups remain a possibility and could be minimized by reducing spray drift.

Although not required for his review, a revision of the Water Resources Exposure Assessment is also included to comply with EFED current policies on estimating surface water exposure concentrations.

Background

The California Department of Pesticide Regulation has requested a Section 18 Specific Exemption for the use Rally 40W Agriculture Fungicide to control powdery mildew (Oidiopsis taurica) on 10,000 acres of peppers grown in that state. The active ingredient of this fungicide is myclobutanil, at 40 %. The period of time for which this use is requested is June 1, 2003 to May 31, 2004. Applications could be made either by ground or by aerial equipment, at a maximum proposed rate of 0.1 lb ai/A/application, 2 applications per season, and 10-14 day interval between application. No application may be made within 2 days of harvest. This is California's section 18 request for myclobutanil use on pepper.

The New Mexico Department of Agriculture has also requested a Section 18 Specific Exemption for the use Rally 40W Agriculture Fungicide to control powdery mildew. This request is for up to 16,900 acres of peppers grown in that state. The period of time for which this use is requested is July 15, 2003 to October 15, 2003. This is New Mexico's seventh section 18 request for myclobutanil use on pepper.

Environmental Fate Summary

No new environmental fate and transport data were submitted with this review. Detailed assessment of the fate characteristic of myclobutanil could be found in the "New Chemical Registration Review" (H. Jacoby/E. Regelman, May 06, 1987) and the "Review of New Uses for Myclobutanil"(M. Waller/T. Nguyen, February 07, 2000 (D260065 /D260111)) reports.

Myclobutanil is persistent in water and moderately persistent in soil. Previously submitted fate studies indicate that myclobutanil is stable to hydrolysis and photolysis in water. However, myclobutanil will photodegrade slowly in soil ($t_{1/2}$ = 143 days). The aerobic metabolism half-life values were reported at 61 to 71 days, and the terrestrial field dissipation at 92 to 292 days.

Based on the McCall classification (McCall PJ, Laskowski DA, Swann RL, and Disburger JJ (1980); "Test Protocol for Environmental Fate and Movement of Toxicants") myclobutanil could be classified as having low to medium mobility in soils (K_{oc} values from 224 for clay loam to 919 for silty clay). The major myclobutanil degradate 1,2,4 triazole possesses lower K_{oc} values than the parent, thus suggesting higher mobility than the parent.

Water Resources Assessment Summary

The Tier I surface and ground water estimated concentrations presented in this document represent the revised Drinking Water Concentrations and Estimated Environmental Concentrations (EECs) for myclobutanil. The "old" concentrations were generated in 1998, using the GENEEC (Generic Expected Environmental Concentration) and SCI-GROW (Screening Concentration in Ground Water) screening models for surface and ground water, respectively. The revision is necessary to comply with EFED current policies on the estimation of surface water EECs (Memorandum "Addendum to Guidance on Use of FIRST and GENEEC2 Programs, WQTT/EFED, 05/01/2001). According to this memorandum, EECs for ecological exposure assessments are generated using the GENEEC2 version 2.0 program (which replaces GENEEC version 1.2), while drinking water exposure assessments are estimated from FIRST (FQPA Index Reservoir Screening Tool). Ground water EECs are still based on the SCI-GROW version 2 program. This revised drinking water assessment also reflects EFED current guidance in selecting environmental fate parameters for input into modeling programs, as described in EFED Interim Guidance for Developing Input Parameters (EFED version I, March 15, 2001.)

Table I lists the "revised" estimated aquatic exposure concentrations for hops and pepper. Hops have the highest use rate among all previously registered uses of myclobutanil (15 applications per year and 0.65 lb ai/A per application at 14-day interval). Pepper is the new use, proposed at a rate of 0.1 lb ai/A/application, 2 maximum applications per year, with a 10-14 day

interval between applications. Aerial and ground applications are allowed for both crops, but aerial application was assumed to simulate the highest level of spray drift. The "old" surface and drinking water concentrations are listed in table II, for information purposes only. The input parameters used to generate the revised water concentrations are listed in table III.

Table I - "Revised" Surface and Ground Water Concentrations for Myclobutanil

	Hop (0.65 lb ai/A/app - 15 app/year, 14-day interval)	**Pepper (0.1 lb ai/A/app - 2 app/year, 10-day interval)**
FIRST- Peak (acute)	333 ppb	12.9 ppb
FIRST- Annual Average (chronic)	86 ppb	3.3 ppb
GENEEC2 - Peak	241 ppb	8.8 ppb
GENEEC2 - 4 day average	240 ppb	8.8 ppb
GENEEC2 - 21 day average	234 ppb	8.6 ppb
GENEEC2 - 60 day average	221 ppb	8.0 ppb
GENEEC2 - 90 day average	211 ppb	7.7 ppb
SCI-GROW	3.2 ppb	< 0.1 ppb

For screening assessments, EFED uses the highest concentration for any crop to which the pesticide can be applied. However, while the concentration predicted for hops is significantly higher than that for peppers, myclobutanil applied to the two crops could not realistically be expected to contaminate the same sources of drinking water. The major basins of the United States are shown in Figure 1. Hops are grown in the Pacific Northwest Basin, while chile peppers described in these emergency exemption requests are grown in the California, Rio Grande and Lower Colorado basins. The use areas do not even intersect in relation to very large-scale (HUC-2) watersheds. If the new concentration predicted for hops leads to prediction of possible human dietary risk, a possible refinement would entail evaluating potential contamination in the pepper use area from other crops to which myclobutanil can be applied.

Table II - "Old" Surface and Ground Water Concentrations for Myclobutanil, based on hops (0.65 lb ai/A/application, 15 applications per year, 14-day interval)

GENEEC Peak	115 ppb
GENEEC Average 56 day	92 ppb
SCI-GROW Concentrations	2.1 ppb

No drinking water assessment was performed on 1,2,4 triazole due to an incomplete environmental fate database for this degradate. However, the available terrestrial field dissipation data indicate that 1,2,4 triazole may not enter surface and ground water resources at any appreciable level.

Based on the above revised estimated surface and ground water concentrations, EFED still believes that myclobutanil does have the potential to leach into ground water and to

contaminate surface water via run-off and spray drift. Therefore, any mitigation and label restriction language which applied to previous section 18 requests for myclobutanil remain applicable for this request.

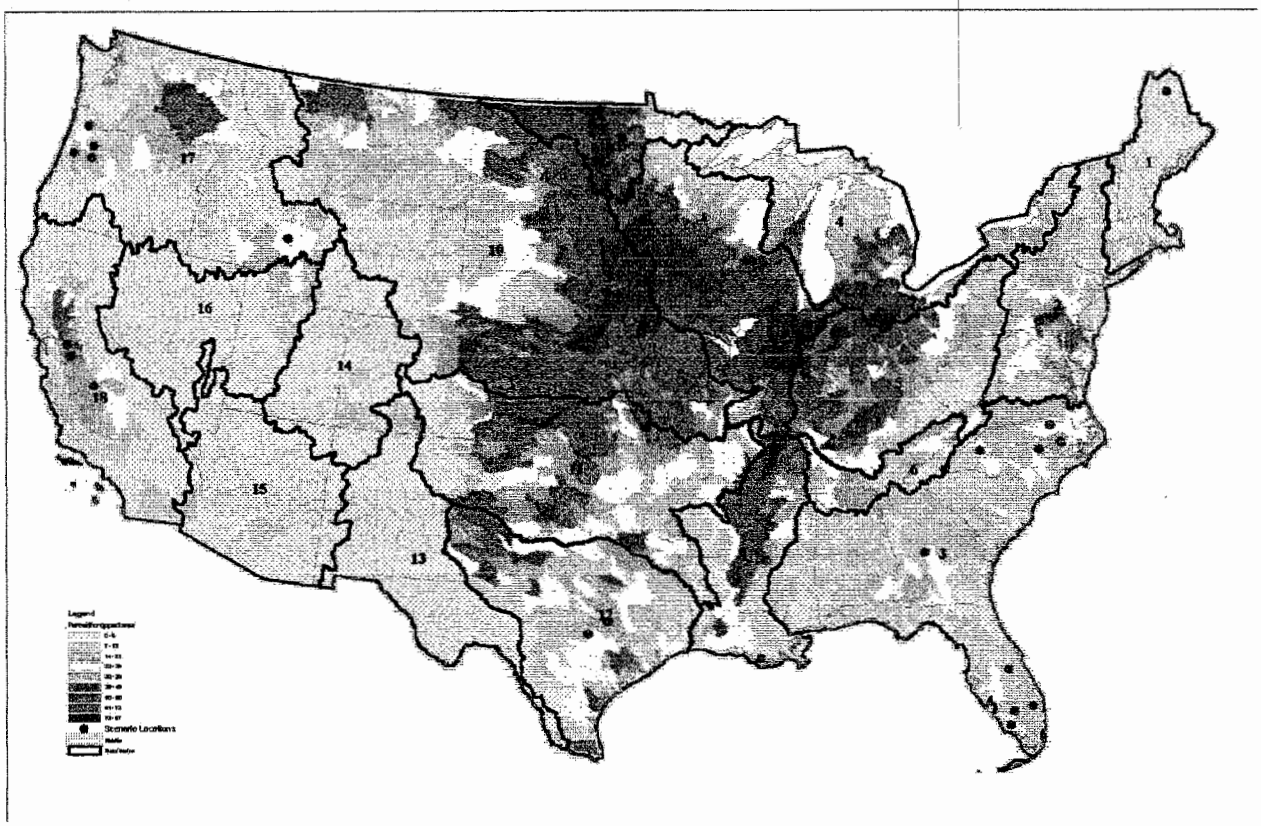

Figure 1: Total agriculture PCA (default PCA) by 8-digit HUCs with major basin overlay. Locations of standard scenarios shown as red dots (some locations represent multiple scenarios)

Legend:

1	New England	10	Missouri
2	Mid Atlantic	11	Arkansas-White-Red
3	South Atlantic-Gulf	12	Texas Gulf
4	Great Lakes	13	Rio Grande
5	Ohio	14	Upper Colorado
6	Tennessee	15	Lower Colorado
7	Upper Mississippi	16	Great Basin
8	Lower Mississippi	17	Pacific Northwest
9	Souris-Red-Rainy	18	California

Risk Assessment Summary

The detailed ecological toxicity data for myclobutanil could be found in the "Review of New Uses for Myclobutanil" report (M. Waller/T. Nguyen, February 07, 2000 (D260065 /D260111)).

Aquatic: According to the aforementioned report, the LC_{50} / EC_{50} values for aquatic organisms range from 0.24 ppm from mysid to 11 ppm for water flea. Therefore, for acute risk, the estimated peak environmental concentration of 0.009 ppm for pepper should not trigger any LOC exceedance for fish and aquatic invertebrates. For chronic risk, the 21-day EEC value (0.009 ppm) estimated from GENEEC2 is used to calculate the Risk Quotients (RQ) for invertebrates, and 60-day EEC (0.008 ppm) for fish. Using the lowest LC_{50} (0.24 ppm for mysid), the RQs for invertebrates and fish are all below 1. Hence, no chronic risk to any aquatic organisms is presumed with the proposed use of myclobutanil on pepper in California.

Terrestrial: Myclobutanil was assessed for use on tomato in the above mentioned report of February 07, 2000, at a rate of 0.1 lb ai/A, 10 applications per year at 7 day interval. The tomato use, which had the same single application rate as pepper but with higher number of applications per year, did not trigger any LOC exceedance for birds and small mammals. The difference in application intervals (7 days for tomato and 10 days for pepper) is not expected to effect this risk assessment to a great extent, as myclobutanil is a relatively stable chemical. Consequently, it is reasonable to assume that minimal risks to terrestrial animals are expected from the proposed use of myclobutanil on pepper in the state of California and New Mexico.

To date, no data on toxicity on myclobutanil to terrestrial plants and non-target insects have been submitted to the Agency for review. Therefore, no conclusions regarding possible hazard to these species groups can be made at this time.

Table III - Summary of Selected Environmental Fate Properties for Myclobutanil

Property	**Range**	**Value used in assessment**	**Model**
Solubility (water)	142 mg/L	142 mg/L	GENEEC2 & FIRST
Hydrolysis $t_{1/2}$	stable at pH 5, 7 and 9	stable - (0 day)	GENEEC2 & FIRST
Aquatic Photolysis $t_{1/2}$	stable	stable - (0 day)	GENEEC2 & FIRST
Aerobic Soil Metabolism $t_{1/2}$	61-71 days in silt loam	81 days (90th upper confidence bound on mean t ½ value) 66 days (average)	GENEEC2 & FIRST SCI-GROW
Terrestrial Field Dissipation $t_{1/2}$	292 days in sandy loam, 92 days in loam soil	not considered	
Anaerobic Soil Metabolism $t_{1/2}$	no appreciable degradation in 62 days	not considered	
Aerobic Aquatic Metabolism $t_{1/2}$	no data	use 2 x aerobic soil metabolism t ½ = 2 x 81 days = 162 days	GENEEC2 & FIRST
K_{ad}	1.46, 2.39, 4.44, 7.08, 9.77	2.39 (lowest non sand value)	GENEEC2 & FIRST
K_{oc}	224, 265, 581, 595, 936	224 (lowest value, since K_{oc}'s show greater than 3-fold variation	SCI-GROW

FIRST Output

RUN No. 1 FOR myclobutanil ON **pepper** * INPUT VALUES *

RATE (#/AC) ONE(MULT)	No.APPS & INTERVAL	SOIL Kd	SOLUBIL (PPM)	APPL TYPE (%DRIFT)	%CROPPED AREA	INCORP (IN)
.100(.192)	2 10	2.4	142.0	AERIAL(16.0)	87.0	.0

FIELD AND RESERVOIR HALFLIFE VALUES (DAYS)

METABOLIC (FIELD)	DAYS UNTIL RAIN/RUNOFF	HYDROLYSIS (RESERVOIR)	PHOTOLYSIS (RES.-EFF)	METABOLIC (RESER.)	COMBINED (RESER.)
81.00	2	N/A	.00- .00	162.00	162.00

UNTREATED WATER CONC (MICROGRAMS/LITER (PPB)) Ver 1.0 AUG 1, 2001

PEAK DAY (ACUTE) CONCENTRATION	ANNUAL AVERAGE (CHRONIC) CONCENTRATION
12.925	3.327

RUN No. 2 FOR myclobutanil ON **hops** * INPUT VALUES *

RATE (#/AC) ONE(MULT)	No.APPS & INTERVAL	SOIL Kd	SOLUBIL (PPM)	APPL TYPE (%DRIFT)	%CROPPED AREA	INCORP (IN)
.650(4.803)	15 14	2.4	142.0	AERIAL(16.0)	87.0	.0

FIELD AND RESERVOIR HALFLIFE VALUES (DAYS)

METABOLIC (FIELD)	DAYS UNTIL RAIN/RUNOFF	HYDROLYSIS (RESERVOIR)	PHOTOLYSIS (RES.-EFF)	METABOLIC (RESER.)	COMBINED (RESER.)

81.00	2	N/A	.00- .00	162.00	162.00

UNTREATED WATER CONC (MICROGRAMS/LITER (PPB)) Ver 1.0 AUG 1, 2001

PEAK DAY (ACUTE) CONCENTRATION	ANNUAL AVERAGE (CHRONIC) CONCENTRATION
332.918	86.169

GENEEC2 Output

RUN No. 1 FOR myclobutanil ON **pepper** * INPUT VALUES *

RATE (#/AC) ONE(MULT)	No.APPS & INTERVAL	SOIL Kd	SOLUBIL (PPM)	APPL TYPE (%DRIFT)	NO-SPRAY ZONE(FT)	INCORP (IN)
.100(.192)	2 10	2.4	142.0	AERL_B(13.0)	.0	.0

FIELD AND STANDARD POND HALFLIFE VALUES (DAYS)

METABOLIC (FIELD)	DAYS UNTIL RAIN/RUNOFF	HYDROLYSIS (POND)	PHOTOLYSIS (POND-EFF)	METABOLIC (POND)	COMBINED (POND)
81.00	2	N/A	.00- .00	162.00	162.00

GENERIC EECs (IN MICROGRAMS/LITER (PPB)) Version 2.0 Aug 1, 2001

PEAK GEEC	MAX 4 DAY AVG GEEC	MAX 21 DAY AVG GEEC	MAX 60 DAY AVG GEEC	MAX 90 DAY AVG GEEC
8.81	8.77	8.54	8.04	7.69

RUN No. 2 FOR myclobutanil ON **hops** * INPUT VALUES *

RATE (#/AC) ONE(MULT)	No.APPS & INTERVAL	SOIL Kd	SOLUBIL (PPM)	APPL TYPE (%DRIFT)	NO-SPRAY ZONE(FT)	INCORP (IN)
.650(4.803)	15 14	2.4	142.0	AERL_B(13.0)	.0	.0

FIELD AND STANDARD POND HALFLIFE VALUES (DAYS)

METABOLIC (FIELD)	DAYS UNTIL RAIN/RUNOFF	HYDROLYSIS (POND)	PHOTOLYSIS (POND-EFF)	METABOLIC (POND)	COMBINED (POND)

81.00	2	N/A	.00- .00	162.00	162.00

GENERIC EECs (IN MICROGRAMS/LITER (PPB)) Version 2.0 Aug 1, 2001

PEAK GEEC	MAX 4 DAY AVG GEEC	MAX 21 DAY AVG GEEC	MAX 60 DAY AVG GEEC	MAX 90 DAY AVG GEEC
241.52	240.51	234.25	220.73	211.11

SCI-GROW Output

SCIGROW VERSION 2.1 MAY 1, 2001

RUN No. 1 FOR myclobutanil on **pepper** ** INPUT VALUES **

Lowest Koc; Mean Half-life (Aerobic)

APP RATE (LBS/AC)	APPS/ YEAR	TOTAL/ SEASON	SOIL KOC	AEROBIC SOIL METAB HALFLIFE (DAYS)
.100	2	.200	224.0	66.00

GROUND-WATER SCREENING CONCENTRATION (IN PPB)

.0700

SCIGROW VERSION 2.1 MAY 1, 2001

RUN No. 2 FOR myclobutanil on **hops** ** INPUT VALUES **

Lowest Koc; Mean Half-life (Aerobic)

APP RATE (LBS/AC)	APPS/ YEAR	TOTAL/ SEASON	SOIL KOC	AEROBIC SOIL METAB HALFLIFE (DAYS)
.650	15	9.750	224.0	66.00

GROUND-WATER SCREENING CONCENTRATION (IN PPB)

3.4147

EPG

NEW MEXICO DEPARTMENT OF AGRICULTURE

OFFICE OF THE DIRECTOR/SECRETARY
BOX 30005 MSC 3189
Las Cruces, New Mexico 88003-8005
Telephone: (505) 646-3007

May 8, 2003

Mr. Dan Rosenblatt, Section Head
U.S. Environmental Protection Agency
Office of Pesticide Programs
Emergency Response Team (7505C)
Document Processing Desk
Crystal Mall 2 – 2nd Floor
1921 Jefferson Davis Highway
Arlington, Virginia 22202

Dear Mr. Rosenblatt:

Enclosed is the New Mexico Department of Agriculture's (NMDA) request for specific exemption from registration under Part 166.8, Chapter 1, Title 40 of the Code of Federal Regulations for myclobutanil (Nova 40W) to control powdery mildew (*Oidiopsis taurica*) on chile peppers and bell peppers in New Mexico. This is a renewal of this specific exemption. Control of this fungus disease is essential if production levels are to be maintained and a profit realized by the farmer.

This proposal has been constructed to meet the needs of New Mexico chile pepper farmers and the intent of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended.

If you have any questions, please contact Cary Hamilton at (505) 646-2133.

Sincerely,

Frank A. DuBois
Director/Secretary

FAD:ch

Enclosures: Request for Section 18
2002 Use Reports

cc: Jeff Witte, Assistant Director, NMDA
Larry Dominguez, Director, Division of Agricultural and Environmental Services, NMDA
Bonnie Rabe, Chief, Bureau of Pesticide Management, NMDA
Carl Young, Project Officer, U.S. EPA Region VI, Dallas, Texas
Brian Brett, State Regulatory Leader, Dow AgroSciences
Cary Hamilton, Registration Specialist, Bureau of Pesticide Management, NMDA

NEW MEXICO

2002 REQUEST FOR SPECIFIC EXEMPTION TO USE MYCLOBUTANIL ON CHILE PEPPERS AND BELL PEPPERS TO CONTROL POWDERY MILDEW (*Oidiopsis taurica*)

1. Identity of contact persons.

Mrs. Bonnie Rabe
Bureau Chief
Bureau of Pesticide Management
New Mexico Department of Agriculture
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Fax (505) 646-5977
email: **brabe@nmda.nmsu.edu**

Mr. Cary Hamilton
Registration Specialist
Bureau of Pesticide Management
New Mexico Department of Agriculture
Telephone: (505) 646-2133
Fax: (505) 646-5977
email: **chamilton@nmda.nmsu.edu**

Section 166.20(a)(1)(ii)

The following qualified experts are also available to answer questions:

Dr. Natalie Goldberg
Extension Plant Pathologist
NMSU CES Extension Plant Sciences
Box 30003, MSC 3AE
Las Cruces, New Mexico 88003
Ph: (505) 646-1621, Fax: (505) 646-8085

Dr. Paul Bosland
Professor
NMSU Agronomy & Horticulture Dept.
Box 30003, MSC 3Q
Las Cruces, New Mexico 88003
Ph: (505) 646-5171, Fax: (505) 646-6041

2. Description of the pesticide.

Common Chemical Name: Nova 40W Agricultural Fungicide
(Active Ingredient): (myclobutanil)

EPA Reg. No. 707-221

Formulation: Wettable powder

% Active Ingredient: 40

Registrant: Dow Agrosciences (formerly Rohm and Haas Company)
(See **Section 3** for copy of Section 18 and Section 3 labels)

3. **Description of the proposed use.**

(I) **Sites to be treated:**

Chile pepper and bell pepper fields in Chaves, Dona Ana, Eddy, Hidalgo, Lea, Luna, Sierra and Socorro counties of New Mexico **(See Section 4).**

(ii) **Method of Application:**

Aerial - minimum of 10 gallons/acre.
Ground - minimum of 20 gallons/acre.

(iii) **Rate of Application:**

The rate of application in terms of active ingredients and product:

4 ounces of product (1.6 ounces or 0.1 pound a.i.)/acre.

(iv) **Total acreage to be treated:**

16,900 acres (maximum potential acres)
8,450acres (anticipated acreage needing treatment) **See Section 5**

(v) **Total amount of pesticide to be used:**

If all of the 8,450 acres are treated using the maximum rate of 0.1 pounds active ingredient (4 fluid ounces) per acre for 4 applications, then a maximum of 3,380 pounds of the active ingredient or 1,056 gallons of formulation of NOVA 40W would be required.

(vi) **Frequency of application:**

Maximum of four applications at 10 to 14 day intervals. Do not exceed four applications per acre.

(vii) **Pre-harvest interval:**

Do not make applications within 48 hours of harvest.

(viii) **Use season:**

From July 15, 2003, **or onset of infection**, through October 15, 2003. Infection may occur if 3-4 days of near 100 percent maximum RH and 40 percent low RH are combined with high temperatures in the 90's.

(ix) Qualifications of applicators using the fungicide and use restrictions:

- All applications of Nova 40W Fungicide will be made by certified private applicators or other certified applicators or personnel under their direct supervision, who have been licensed by the New Mexico Department of Agriculture (NMDA) in Category 1A, Agricultural Pest Control, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act, as amended.
- Do not allow worker entry into treated areas during the restricted-entry interval (REI) of **48 hours.**
- Do not make applications within 48 hours of harvest.
- Do not apply this material through any type of irrigation system.
- Do not apply directly to water or to areas where surface water is present.
- Do not contaminate water when disposing of equipment wash waters. Do not apply when weather conditions favor drift or runoff from treated areas.
- NMDA shall be immediately notified of any adverse effects resulting from the use of this fungicide in connection with this specific exemption.

4. Alternative methods of control.

Other pesticides:

Several registered fungicides have been used to control powdery mildew. Products containing sulfur have been shown to exhibit phytotoxicity when daily temperatures exceed 90°F. Such daily temperatures are the norm for New Mexico pepper production areas. **Section 6** presents a letter from California documenting the high temperature phytotoxicity problems.

Recently, strobilurin fungicides (Quadris® or Flint®) were labeled on peppers to help manage this disease. However, there is significant concern for the development of fungal resistance to these materials. Product labels for strobilurin fungicides are specific in stating the need to use these materials in rotation with other fungicides with differing modes of action. Without Nova®, the growers will be limited in their ability to fight the disease over the course of the season. See **Section 7** for letters of support.

Resistant cultivars:

No work has been performed in New Mexico on powdery mildew resistant cultivars of chile or bell peppers. According to New Mexico State University (NMSU) Extension Plant Pathologist, Dr. Natalie Goldberg, there has been no evidence seen that the common chile pepper varieties grown in New Mexico show any tolerance to powdery mildew, but this has not been fully researched (personal communication). She also stated that cultivar selection is highly dependent on the market, the processors specify the varieties they want grown, and fresh market cultivars must possess certain characteristics for pod type and heat. Dr. Paul Bosland, professor of agronomy and NMSU chile pepper breeder, also confirmed Dr. Goldberg's statements that no resistance to powdery mildew has been seen in the chile pepper varieties grown in New Mexico (personal communication).

Bio-Control Agents:

An investigation into the biocontrol agent AQ-10 showed that it is registered to control powdery mildew on peppers, but at this time, is not registered for use in New Mexico. The registration agent at Ecogen has not pursued registration of AQ-10 in New Mexico. It has not been used previously in the state and its efficacy is not known at this time. The NMSU plant pathologist has been notified that this biofungicide is available and should be included in control trials.

5. Effectiveness of proposed use.

Section 8 presents efficacy data from California. Comparative efficacy data from New Mexico are not available.

6. Discussion of residues for food use.

Field residue trials of myclobutanil are currently being conducted on a national basis in Texas and California by the IR-4 program. **Section 6** presents a letter from the IR-4 western region program manager addressing this issue. Mr. Rick Melnicoe of the IR-4 program (personal communication March 1998) stated that progress has been made toward the registration of myclobutanil on peppers, residue studies have been performed and are currently being analyzed. These studies were expected to be finished and submitted to Environmental Protection Agency (EPA) in June 1998.

7. Discussion of risk information.

The use of myclobutanil has not posed a threat to man or the environment with the current Section 3 labeled uses. NMDA does not anticipate any problems with this use on chile and bell peppers.

8. Coordination with other affected state or federal agencies.

The following State/Federal agencies and organizations will be notified of the New Mexico Department of Agriculture's submission of this application for a specific exemption when approved:

- The Environmental Branch of the U.S. Fish and Wildlife Service in the Albuquerque regional office
- New Mexico NRCS State/District Office, Albuquerque
- New Mexico State University Cooperative Extension Service

Response from agencies will be forwarded to EPA when and if received.

9. Notification of registrant or basic manufacturer.

Dow Agrosciences (formerly Rohm and Haas Company) has been notified and is fully aware and supportive of this request for this specific exemption. **Section 7** presents a letter of support from Dow Agrosciences.

10. Description of proposed enforcement program Section 18 request history.

The State Legislature has endowed the New Mexico Department of Agriculture with the authority to regulate the distribution, storage, sale, use and disposal of pesticides in the state of New Mexico. In addition, the EPA/NMDA grant cooperative enforcement agreement provides the Department with the authority to enforce the provisions of the FIFRA, as amended, within the state. Therefore, the Department is not lacking in authority to enforce the provisions of an EPA approved specific exemption.

If this specific exemption request is approved, NMDA Pesticide Enforcement Inspectors will make a number of random, unannounced calls on both growers and certified commercial applicators to check for compliance with the provisions of the specific exemption. All uses will be required to be reported to NMDA.

If violations are discovered, appropriate enforcement action will be taken.

11. Section 18 request history.

The final reports for the 2002 exemption request, File No. 02-NM-06 (non-bell peppers) and File No. 02-NM-07 (bell peppers) are included with this specific exemption request (**See Section No. 11**). No myclobutanil was applied to bell peppers during the 2002 season. This is the sixth time New Mexico has requested a specific exemption for the use of myclobutanil in this or any other situation.

12. Information required for a Specific Exemption.

NMDA is requesting a specific exemption for the use of Nova 40W (myclobutanil) to control powdery mildew on chile in anticipation of unusual environmental conditions (high relative humidity early in the season) that will favor the development of powdery mildew in the pepper growing areas of the state.

(I) Scientific and common name of pest:

The pest of concern is powdery mildew (*Oidiopsis taurica*). It is a fungal disease on many crops but is fairly uncommon in New Mexico on peppers. The main symptom of infection is the presence of a white, powdery fungal growth which covers the lower leaf surface. The upper leaf surface of infected leaves may show a yellow or brown discoloration and, in some cases, the fungus may sporulate on the upper leaf surface. Infected leaves will drop prematurely from the plant, exposing the fruit to the sun, and resulting in sun scald on the fruit. The fungus occasionally attacks the fruit directly. The disease is most severe on older leaves just prior to fruit set, but it can occur anytime during the season if conditions are favorable.

(ii) Events:

Typically, New Mexico experiences hot dry conditions which are unfavorable for the development of fungal diseases. However, in 1997 strong monsoonal rains and accompanying high humidities occurred and these factors combined resulted in an outbreak of powdery mildew. For the last several years, these conditions have continued to be problematic. Early detection and early treatment of powdery mildew are key to successful management of this disease. Delayed treatment ultimately leads to only partial control. Since this has been a recurring problem, we are trying to prevent a powdery mildew outbreak from becoming a crisis. Weather data from the Agricultural Experiment Stations in Las Cruces and Artesia, New Mexico, show several periods during spring 1997 when the minimum relative humidity did not drop below 30 percent for at least three days (May 8-12 at the Artesia Agricultural Science Center; May 9-12 at the NMSU Plant Science Farm; and again May 19-22, May 29-31, June 6-10, and June 25-27 at the Artesia Ag. Science Center) **(See Section 9).**

13. Anticipated risks

NMDA does not expect any adverse effects associated with the use of this fungicide.

14. Discussion of economic loss.

Historic gross revenues:

Number of acres of peppers grown in New Mexico and gross revenues for 1992, 1993, 1994, 1995, and 1996[1].

Year	No. Acres	Production Green (tons)	Production Red (tons)	Value ($1000)
1992	34,500	69,000	47,400	61,845
1993	29,900	81,000	36,000	56,077
1994	27,900	82,000	39,700	55,868
1995	22,400	62,000	26,800	44,840
1996	28,700	83,700	32,165	65,460

[1]New Mexico Agricultural Statistics, New Mexico Agricultural Statistics Service, USDA

Estimated net and gross revenues:

Agricultural statistics for 2001 (the most recent available) show a total of 16,900 acres of chile harvested in the referenced counties with a state wide total of 17,700 acres of chile. Planted acreage in 1999 has decreased and was estimated to approach 30,000 acres in the referenced counties. **Section 10** shows farm budgets for green chile grown in Dona Ana and Sierra counties, and red chile grown in Chaves County for 2003. Budgets for other listed counties have similar cost and return estimates. These budgets are provided by Dr. James Libbin, Department of Agricultural Economics and Agricultural Business, College of Agriculture and Home Economics, New Mexico State University. The impact of various levels of yield reduction due to an infection of powdery mildew is obvious. Although a farmer would experience a unique yield loss and cost scenario, **Section 10** does provide estimates that should bracket most, if not all, likely situations. Powdery mildew infection can cause serious economic loss if left unchecked and exerts a considerable negative impact even when effectively controlled.

Supplemental Labeling

Dow AgroSciences

Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268-1054 USA

Nova* 40W

Section 18 Specific Exemption

For Distribution and Use Only in the State of New Mexico

For Control of Powdery Mildew on Peppers

ATTENTION

- **Section 18** Specific **Exemption:** This label is authorized under EPA specific exemption pursuant to Section 18 of the Federal Insecticide Fungicide and Rodenticide Act as amended.
  Effective Dates: MM-DD-2003 to MM-DD-2003
- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- Read the label affixed to the container for Nova* 40W fungicide before applying.
- **The following two products may be used in accordance with this label, Nova 40W by Dow AgroSciences (EPA Reg. No. 62719-411) or Nova 40W by Rohm and Haas (EPA Reg No. 707-221). All applicable directions, restrictions and precautions on this label as well as the EPA-registered product label must be followed.**

Directions for Use

Apply Nova* 40W fungicide may be used for control of powdery mildew on peppers. Apply Nova 40W at the rate of 4 ounces (0.1 lb active) per acre in sufficient spray volume to provide uniform coverage of crop foliage. Use a minimum spray volume of 10 gallons per acre by air or 20 to 30 gallons per acre by ground equipment. Begin applications at first sign of disease and make subsequent applications at a 10 to 14 day interval.

Restrictions

- For the use described in this supplemental labeling, do not apply this product through any type of irrigation system.
- **Do not** make applications within 48 hours of harvest.
- **Do not** make more than 4 applications or apply more than 16 ounces (0.4 lb. active) per acre per year.
- **Rotation Crops** - Myclobutanil treated fields can be rotated at any time to crops, which are included on a registered myclobutanil label. Crops on a registered label may be planted immediately after the last treatment. Do not plant other crops within 30-days after the last application of myclobutanil.

*Trademark of Dow AgroSciences LLC

EPA Accepted: 04-12-2002
NM File Symbol: __-NM-__

Revisions: Renewal of Section 18 use exemption for control of powdery mildew in peppers for the year 2003.

SEE PAMPHLET ATTACHED TO THIS CONTAINER FOR COMPLETE USE DIRECTIONS.

NOT FOR US THE FOLLOWING STATES: ALASKA, ARIZONA, C ORNIA, HAWAII, IDAHO, M NEVADA, OREGON, UTAH, WASHINGTON AND WYOMING

345

NOVA 40W Agricultural Fungicide

In Water-Soluble Pouches

PESTICIDE MAY 10 2002

DO NOT REMOVE PACKAGES FROM CONTAINER EXCEPT FOR IMMEDIATE USE

ACTIVE INGREDIENT	
MYCLOBUTANIL	
(±)-butyl-(±)-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile	40%
INERT INGREDIENTS	60%
TOTAL	100%

KEEP OUT OF REACH OF CHILDREN

WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF ON SKIN	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advise.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact Rohm and Haas Company (215)592-3000 for emergency medical treatment information.

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Restrictions, and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

EPA REG. NO. 707-221

EPA EST. NO. 33967-NJ-1(E); 67545-AZ-1(G); 65387-AR-002(B)

Superscript used is first character of lot number

PRODUCED IN U.S.A. OF U.S. AND FOREIGN MATERIALS.

ROHM AND HAAS COMPANY, 100 INDEPENDENCE MALL WEST, PHILADELPHIA, PA 19106-2399

NET CONTENTS: 1 LB. 4 OZ. (.567 KG.) (4-5 OZ. WATER-SOLUBLE POUCHES)

ROHM AND HAAS

9650-D6

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Causes substantial but temporary eye injury. Harmful if inhaled, swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (Category A in EPA's Chemical-Resistant Category Selection Chart)
- Shoes *plus socks* • Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standards (WPS) for agricultural pesticides[40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift or runoff from areas treated.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

SEE SUPPLEMENTAL LABELING ATTACHED TO THE BOTTOM OF THIS BAG FOR COMPLETE USE DIRECTIONS.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Store in a cool, dry area above freezing. The water-soluble pouch may become brittle at storage temperatures below 32°F but the fungicide is not affected. Do not remove the water-soluble pouches from the container except for immediate use.

PESTICIDE DISPOSAL: Wastes resulting in the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Completely empty container into application equipment. Dispose of in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear eye protection. Wear protective clothing. Spray water on powder and dust. Scoop or shovel solid material into a suitable container for recovery or disposal. Keep dust to a minimum. Flush contaminated area with a large amount of water to a chemical or sanitary sewer containing a settling pit. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Thoroughly launder clothing before reuse. Refer to Precautionary Statements.

NOVA is a registered trademark of Rohm and Haas Company.

ATTACHED USE DIRECTIONS

8129814

NOVA

40W Agricultural Fungicide

In Water-Soluble Pouches

NOT FOR USE IN THE FOLLOWING STATES: ALASKA, ARIZONA, CALIFORNIA, HAWAII, IDAHO, MONTANA, NEVADA, OREGON, UTAH, WASHINGTON AND WYOMING.

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Restrictions and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

KEEP OUT OF REACH OF CHILDREN

WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

	FIRST AID
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF ON SKIN	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advise.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
You may also contact Rohm and Haas Company (215)592-3000 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Causes substantial but temporary eye injury. Harmful if inhaled, swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (Category A in EPA's Chemical-Resistant Category Selection Chart)
- Shoes plus socks • Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standards (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ACTIVE INGREDIENT	
MYCLOBUTANIL α-butyl-α-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile	40%
INERT INGREDIENTS	60%
TOTAL	100%

ROHM HAAS

EPA REG. NO. 707-221

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift or runoff from areas treated.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

PESTICIDE MAY 10 2002 MANAGEMENT

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (Category A in EPA's Chemical-Resistant Category Selection Chart)
- Shoes plus socks • Protective eyewear

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

GENERAL INFORMATION

NOVA 40W fungicide is a systemic, protectant and curative fungicide recommended for the control of specific diseases mentioned on this label. Optimum disease control is achieved when the fungicide is applied in a regularly scheduled preventative spray program.

USE RATE DETERMINATION – Carefully read, understand and follow label use rates and restrictions.

Under low disease conditions, minimum label use rates per application can be used while maximum label rates and shortened spray schedules are recommended for severe or threatening disease conditions.

For proper application, determine the number of acres to be treated, the recommended label use rate and the gallonage to be applied per acre. Prepare only the amount of spray solution required to treat the measured acreage. Careful calibration of spray equipment is recommended prior to use.

ROTATION CROPS - Crops on this label may be planted immediately after the last treatment. Do not plant other crops within 30 days after the last application.

HANDLING – The enclosed pouches of NOVA 40W fungicide are water-soluble. Do not allow pouches to become wet prior to adding to the spray tank. Do not handle the pouches with wet hands or wet gloves. Always reseal overwrap bag to protect remaining unused pouches. Do not remove water-soluble pouches from overwrap except to add directly to the spray tank.

APPLICATION

Ground – Thorough coverage sprays generally result in optimum disease control. To achieve good coverage use proper spray pressure, gallonage per acre, nozzles, nozzle spacing and tractor speed. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration.

Aerial – Apply in a minimum of 10 gallons of water per acre. Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.

Chemigation – Do not apply this product through any type of irrigation system.

MIXING – Always place NOVA 40W fungicide into solution prior to adding co-applied agricultural chemicals registered for use on specific crop or crops being treated. Add the required number of unopened pouches as determined by the dosage recommendations into the spray tank with agitation. Depending on the water temperature and the degree of agitation, the pouches should dissolve completely within approximately ten minutes from the time they are added to the water.

COMPATIBILITY – NOVA 40W fungicide is compatible with most commonly used agricultural fungicides, insecticides, growth regulators, micronutrients and spray adjuvants. When preparing tank mixes, user should consult spray compatibility charts or State Cooperative Extension Service Specialists prior to actual use.

NOTE: NOVA 40W fungicide is compatible with boron and spray oils; however, the water-soluble pouches must be completely dissolved before adding spray oils or products containing boron to spray mixtures.

GENERAL USE DIRECTIONS FOR TREE FRUITS – Best control of labeled diseases is achieved when NOVA 40W fungicide is applied on a 7- to 10-day application schedule.

NOVA 40W is a systemic fungicide and does not redistribute with rainfall after application. Application equipment spray nozzles should be adjusted to apply a uniform spray throughout the entire tree canopy.

The following use recommendations are to be used as guidance in determining the amount of NOVA 40W fungicide to be used per 100 gallons spray or per acre. Refer to specific tree fruit use directions to determine actual use rates for the control of labeled diseases.

DETERMINATION OF USE RATES ON AN ACRE BASIS

The amount of NOVA 40W fungicide required per acre varies with tree size and the volume of fruit and foliage to be treated. The following summary table may be used as additional guidance for the determination of appropriate per acre use rates for NOVA 40W fungicide:

TREE HEIGHT (FEET)	OUNCES NOVA 40W FUNGICIDE PER ACRE	
	APPLES AND MAYHAWS	STONE FRUITS
10 (or less)	2.5 to 5.0	2.5 to 4.0
15	3.75 to 6.0	4.0 to 6.0
20 (or more)	5.0 to 10.0	6.0

CONCENTRATE SPRAY APPLICATIONS

NOVA 40W fungicide should be used at the recommended use rate per acre in either dilute or concentrate sprays. The following formula should be used to determine the equivalent amount of product per acre in 2X, 3X, etc. spray solutions:

$$\frac{\text{Ounces NOVA 40W per acre X 100}}{\text{Gallons spray applied per acre}} = \text{ounces NOVA 40W per 100 gallons}$$

Example:

An apple orchard consisting of apple trees 18 feet in height will require 5 ounces NOVA 40W for adequate apple scab control. Application equipment has been calibrated to apply 80 gallons spray per acre, therefore:

$$\frac{\text{5 ounces NOVA 40W per acre X 100}}{\text{80 gallons spray applied per acre}} = \text{6.25 ounces per 100 gallons}$$

DILUTE, THOROUGH COVERAGE APPLICATIONS

Dilute, thorough coverage applications are based on the amount of spray solution required to thoroughly wet trees until spray runoff. The following specific use directions for apples and mayhaws utilize a 400-gallon per acre dilute basis and the specific use directions for stone fruits utilize a 250-gallon per acre dilute basis.

USE DIRECTIONS FOR GRAPES – Thorough spray coverage is essential for good disease control. NOVA 40W fungicide should be applied in sufficient water to insure adequate coverage.

Disease	Rate of NOVA 40W Oz./Acre	Use Recommendations	Restrictions
Anthracnose (*Elsinoe* sp.)	3 to 5 (1.2 to 2.0 oz. active)	Begin application when new shoots are 1 to 3 inches in length and continue on an application schedule which does not exceed 14 days.	Do not apply within 14 days of harvest.
Black Rot (*Guignardia* sp.)		**Preventative Schedule:** Begin application when new shoots are 1 to 3 inches in length and continue applications on an application schedule which does not exceed 14 days. Use higher rate under heavy disease pressure. **Postinfection Schedule:** Apply within 72 hours after the beginning of an infection period.	Do not apply more than 1.5 lbs. (0.6 lbs. active) per acre per year.
Powdery Mildew (*Uncinula* sp.)		Begin application at preboom (12- to 18-inch shoots) and do not extend applications beyond a 21-day interval. Use higher rate or shorter spray interval on susceptible varieties or under heavy disease pressure.	

USE DIRECTIONS FOR HERBS AND SPICES

Crop	Disease	Rate of NOVA 40W Oz./Acre	Use Recommendations	Restrictions
Peppermint Spearmint	Powdery Mildew (*Erysiphe* sp.) Rust (*Puccinia* sp.)	4 to 5 (1.6 to 2.0 oz. active)	Begin application in early spring when plants break dormancy. Continue applications on a 14- to 21-day application schedule.	Do not apply more than 15 ounces (0.375 lbs. active) per acre per growing season. Do not apply within 30 days of harvest.

USE DIRECTIONS FOR APPLES AND MAYHAWS

Disease	Rate of NOVA 40W Oz./100 Gals.*	Use Recommendations	Restrictions
Powdery Mildew (*Podosphaera* sp.)	1.25 to 2.5 (0.5 to 1.0 oz. active)	Begin application at tight cluster and continue through the second cover spray. Additional sprays beyond second cover may be needed on susceptible varieties or under heavy disease pressure. Use high label rate if powdery mildew was present in previous years.	Do not apply within 14 days of harvest. Do not apply more than 5 pounds (2 lbs. active) NOVA 40W fungicide per acre per season.
Rusts (*Gymnosporangium* spp.)	1.25 to 2.0 (0.5 to 0.8 oz. active)	Begin applications at pink stage and continue through the second cover spray.	
Scab (*Venturia* sp.) Prebloom	1.25 to 2.0 (0.5 to 0.8 oz. active)	Begin application at green tip or when environmental conditions become favorable for primary scab development. Apply NOVA 40W fungicide alone or tank mixed with a protectant fungicide on a 7- to 10-day schedule.	
Bloom, Postbloom	1.25 to 2.0 (0.5 to 0.8 oz. active)	Use NOVA 40W fungicide in a tank mixture with the recommended rate of a protectant fungicide registered for use on apples, for improved fruit scab and summer disease control.	
Postinfection	2.0 (0.8 oz. active)	NOVA 40W fungicide provides 96-hour postinfection control or curative activity. Apply as soon as possible after infection period. Follow with a standard preventative spray schedule.	

*Based on dilute sprays with a 400-gallon per acre basis.

USE DIRECTIONS FOR SMALL FRUITS

Crop	Disease	Rate of NOVA 40W Oz./Acre	Use Recommendations	Restrictions
Blackberry*	Cane and Leaf Rust (*Kuehneola* sp.) Orange Rust (*Arthuniomyces* sp.) Powdery Mildew (*Sphaerotheca* sp.) Yellow Rust (*Phragmidium* sp.)	1.25 to 2.5 (0.5 to 1.0 oz. active)	Applications should be initiated as early as bud break and should continue at 10- to14-day intervals, depending on the disease(s) to be controlled. Use the shorter spray interval under heavy disease pressure.	Applications may be made up to the day of harvest. Do not apply more than 10 ounces (0.25 lbs. active) per acre per growing season.
Currant	Powdery Mildew (*Sphaerotheca* sp.)	5.0 (2.0 oz. active)	Make applications at pre-bloom, full bloom and 2 weeks later.	Applications may be made up to the day of harvest. Do not apply more than 40 ounces (1.0 lb. active) per acre per growing season.
Gooseberry	Anthracnose (*Drepanopezza* sp.)		Begin applications when the first leaf has completely unfolded, then at 10- to 14-day intervals as long as environmental conditions favor continued disease development.	
	Powdery Mildew (*Sphaerotheca* sp)		Make applications at pre-bloom, full bloom and 2 weeks later.	
Raspberry*	Cane and Leaf Rust (*Kuehneola* sp.) Leaf Spot (*Sphaerulina* sp.) Orange Rust (*Arthuniomyces* sp.) Powdery Mildew (*Sphaerotheca* sp.) Yellow Rust (*Phragmidium* sp.)	1.25 to 2.5 (0.5 to 1.0 oz. active)	Applications should be initiated as early as bud break and should continue at 10- to 14-day intervals, depending on the disease(s) to be controlled. Use the shorter spray interval under heavy disease pressure.	Applications may be made up to the day of harvest. Do not apply more than 10 ounces (0.25 lbs. active) per acre per growing season.
Strawberry	Powdery Mildew (*Sphaerotheca* sp.) Leaf Spot (*Mycosphaerella* sp.) Leaf Blight (*Phomopsis* sp.)	2.5 to 5.0 (1.0 to 2.0 oz. active)	Begin applications when disease first appears or when conditions favor disease development. Repeat applications at 14- to 21-day intervals.	Applications may be made up to the day of harvest. Do not apply more than 30 ounces (0.75 lbs. active) per acre per year. Observe a 30-day plant-back interval between the last application and planting new crops at the treatment site.

*Includes use on the following members of the berries group: bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these.

USE DIRECTIONS FOR STONE FRUIT – Applications may be made up to the day of harvest.

Crop	Disease	Rate of NOVA 40W		Use Recommendations	Restrictions
		Oz./100 Gals.*	Oz./Acre		
Apricots	Brown Rot Blossom Blight (*Monilinia* spp.)	1.25 to 2.0 (0.5 to 0.8 oz. active)	2.5 to 6.0 (1.0 to 2.4 oz. active)	Begin application at early red bud stage before infection occurs. If conditions are favorable for disease development, apply again at full bloom and at petal fall.	Do not apply more than 2.75 lbs. (1.1 lbs. active) per acre per season.
	Brown Rot (*Monilinia* sp.)			Apply 6 ounces (2.4 oz. active) per acre on a 7- to 14-day schedule. Applications should be made whenever environmental conditions favor disease development during the month prior to harvest.	
	Powdery Mildew (*Podosphaera* sp.)			Follow brown rot blossom blight schedule making additional applications at 10- to 14-day intervals until terminal growth ceases.	
	Shothole (*Stigmina* sp.)			Follow brown rot blossom blight schedule making additional applications at 7- to 10-day intervals as long as needed.	
Cherries	Brown Rot Blossom Blight (*Monilinia* spp.)			Begin application at early popcorn stage, before infection occurs. If conditions are favorable for disease development, apply again at full bloom and at petal fall.	Do not apply more than 3.25 lbs. (1.3 lbs. active) per acre per season.
	Brown Rot (*Monilinia* sp.)			Refer to Apricots.	
	Powdery Mildew (*Podosphaera* and *Sphaerotheca* spp.)			Refer to Apricots.	
	Leaf Spot (*Blumeneila* sp.)			Follow brown rot blossom blight schedule and continue applications at 7- to 10-day intervals. Make additional applications after harvest.	
Nectarines	Brown Rot Blossom Blight (*Monilinia* spp.)			Begin application at early pink bud stage before infection occurs. If conditions are favorable for disease development, apply again at full bloom and at petal fall.	
	Brown Rot (*Monilinia* sp.)			Refer to Apricots.	
	Powdery Mildew (*Podosphaera* and *Sphaerotheca* spp.)			Refer to Apricots.	
	Shothole (*Stigmina* sp.)			Follow brown rot blossom blight schedule making additional applications at 7- to 10-day intervals as long as needed.	
Peaches	Brown Rot Blossom Blight (*Monilinia* spp.)			Begin application at early pink bud stage before infection occurs. If conditions are favorable for disease development, apply again at full bloom and at petal fall.	
	Brown Rot (*Monilinia* sp.)			Refer to Apricots.	
	Powdery Mildew (*Podosphaera* sp.)			Refer to Apricots.	
	Rust (*Tranzschelia* sp.)			Apply 6 ounces (2.4 oz. active) per acre. Begin application approximately 8 weeks after flowering if environmental conditions are favorable for disease development. For optimum disease control, do not apply on an application schedule exceeding 21 days.	
Plums Prunes	Brown Rot Blossom Blight (*Monilinia* spp.)			Begin application at green tip, before infection occurs. If conditions are favorable for disease development, apply again at full bloom and at petal fall.	Do not apply more than 2.75 lbs. (1.1 lbs. active) per acre per season.
	Brown Rot (*Monilinia* sp.)			Refer to Apricots.	
	Rust (*Tranzschelia* sp.)			Refer to Peaches.	

*250-gallon dilute spray per acre basis.

USE DIRECTIONS FOR VEGETABLES

Crop	Disease	Rate of NOVA 40W Oz./Acre	Use Recommendations	Restrictions
Asparagus	Rust (*Puccinia sp.*)	5 (2.0 oz. active)	Begin application to the developing ferns after harvest has taken place. Repeat application on a schedule not to exceed 14 days. Apply with a spray adjuvant, such as LATRON B-1956 or LATRON CS-7.	Do not apply to the harvestable spears. Do not apply within 180 days of harvest in all states except California. When a 180 day treatment to harvest interval is used, do not make more than 6 applications of 5 oz. (0.125 lbs. active) product per growing season. This is equivalent to 30 ounces product (0.75 lbs. active) per acre per year. When a 30 day treatment to harvest intervals is used, do not make more than 4 applications of 5 oz. (0.125 lbs. active) or 20 oz. (0.5 lbs. active) per acre per year.
Cucurbits Balsam apple Balsam pear Bitter melon Cantaloupe Casaba Chayote Chinese cucumber Chinese waxgourd Citron melon Crenshaw melon Cucumber Golden pershaw melon Gourd, edible Gourd, ornamental Honey balls Honeydew melon Mango melon Persian melon Pineapple melon Pumpkin Santa Claus melon Snake melon Squash, summer Squash, winter Watermelon	Powdery Mildew (*Erysiphe* and *Sphaerotheca* spp.)	2.5 to 5 (1.0 to 2.0 oz. active)	Begin application at first sign of disease development and continue on a 7- to 10-day application schedule. For the control of other foliar curcurbit diseases, co-applications of registered protectant fungicides should be made according to label use directions.	Do not apply more than 1.5 lbs. (0.6 lbs. active) per acre per crop. Applications may be made up to, and including the day of harvest. Observe a 30-day plant-back interval between the last application and planting new crops at the treatment site.
Snap Beans	Rust (*Uromyces sp.*) Pod Tip Rot (*Rhizoctonia sp.*)	4 to 5 (1.6 to 2.0 oz. active)	Begin applications when rust is first observed. For pod tip rot, begin applications when pods begin to develop. Continue applications on a 7- to 10-day schedule if conditions remain favorable for disease development.	Applications may be made up to, and including the day of harvest. Do not apply more than 1.25 lb. (0.5 lbs. active) per acre per crop. Observe a 30-day plant-back interval between the last application and planting new crops at the treatment site.
Tomatoes	Powdery Mildew (*Leveillua sp.*)	2.5 to 4.0 (1 to 1.6 oz. active)	Begin applications at the first sign of disease or when environmental conditions are favorable for disease development. Do not exceed 21 days between application intervals. Apply using a minimum of 20 gallons of water per acre by ground or a minimum of 10 gallons of water by air.	Do not apply more than 1.25 lbs. (0.5 lbs. active) per acre per crop. Applications may be up to, and including the day of harvest. Observe a 30-day plant-back interval between the last application and planting new crops at the treatment site.

USE DIRECTIONS FOR NON-FOOD USE

Crop	Disease	Rate of NOVA 40W Oz./Acre	Use Recommendations	Restrictions
Hybrid Poplar (For use in nurseries or forested areas used for wood pulp production)	Rust (Melampsora spp.)	4 to 6 (1.6 to 2.4 oz. active)	Begin applications at the first sign of disease and repeat applications at 10- to 14-day intervals.	Do not apply more than 1.5 lbs. (0.6 lbs. active) per acre per year.
Douglas Fir (Nursery Use Only)	Needle Rust (Melampsora spp.)	5 to 10 (2 to 4 oz. active)	Begin applications in early spring. Continue applications at 2- to 3-week intervals until the threat of infection is past. A spray adjuvant such as LATRON CS-7® or LATRON B-1956® should be added to obtain good spray coverage and disease control.	
Loblolly Pine (Nursery Use Only)	Fusiform Rust (Cronartium quercuum)	5 to 10 (2 to 4 oz. active)	Begin applications in early spring. Continue applications at 2- to 3-week intervals until the threat of infection is past. A spray adjuvant such as LATRON CS-7 or LATRON B-1956 should be added to obtain good spray coverage and disease control.	

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Store in a cool dry area above freezing. The water-soluble pouch may become brittle at storage temperatures below 32°F, but the fungicide is not affected. Do not remove the water-soluble pouches from the container except for immediate use.

PESTICIDE DISPOSAL: Wastes resulting in the use of this product may be disposed of on site or at an approved waste disposal facility.

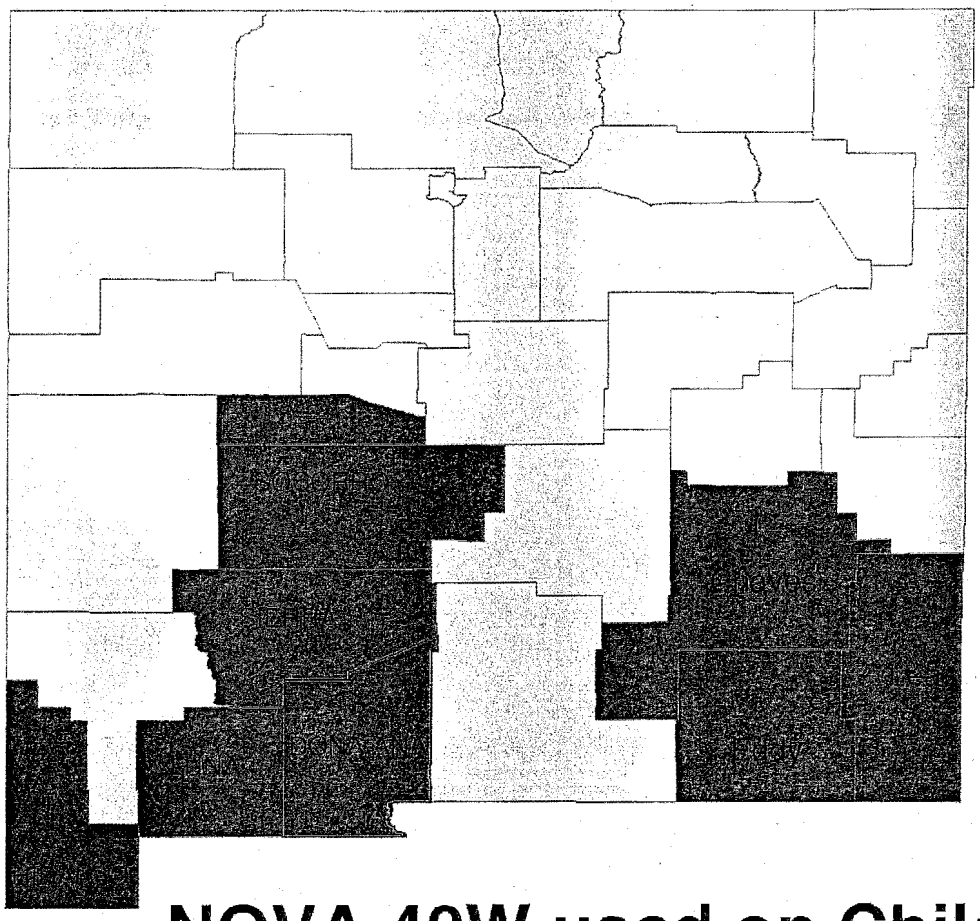
CONTAINER DISPOSAL: Completely empty container into application equipment. Dispose of in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear eye protection. Wear protective clothing. Spray water on powder and dust. Scoop or shovel solid material into a suitable container for recovery or disposal. Keep dust to a minimum. Flush contaminated area with a large amount of water to a chemical or sanitary sewer containing a settling pit. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Thoroughly launder clothing before reuse. Refer to Precautionary Statements.

Rohm and Haas Company, 100 Independence Mall West, Philadelphia, PA 19106-2399, Telephone: (215) 592-3000

8139-814

NEW MEXICO



NOVA 40W used on Chile Peppers in New Mexico

0 120 240 480

Miles

Counties Treated With NOVA 40W

N
W E
S

1:5,256,946

1 inch equals 82.969478 miles

Maximum Potential Acres:

The following table shows the chile acreage harvested in 2001,the most recent statistics available, in various affected counties.

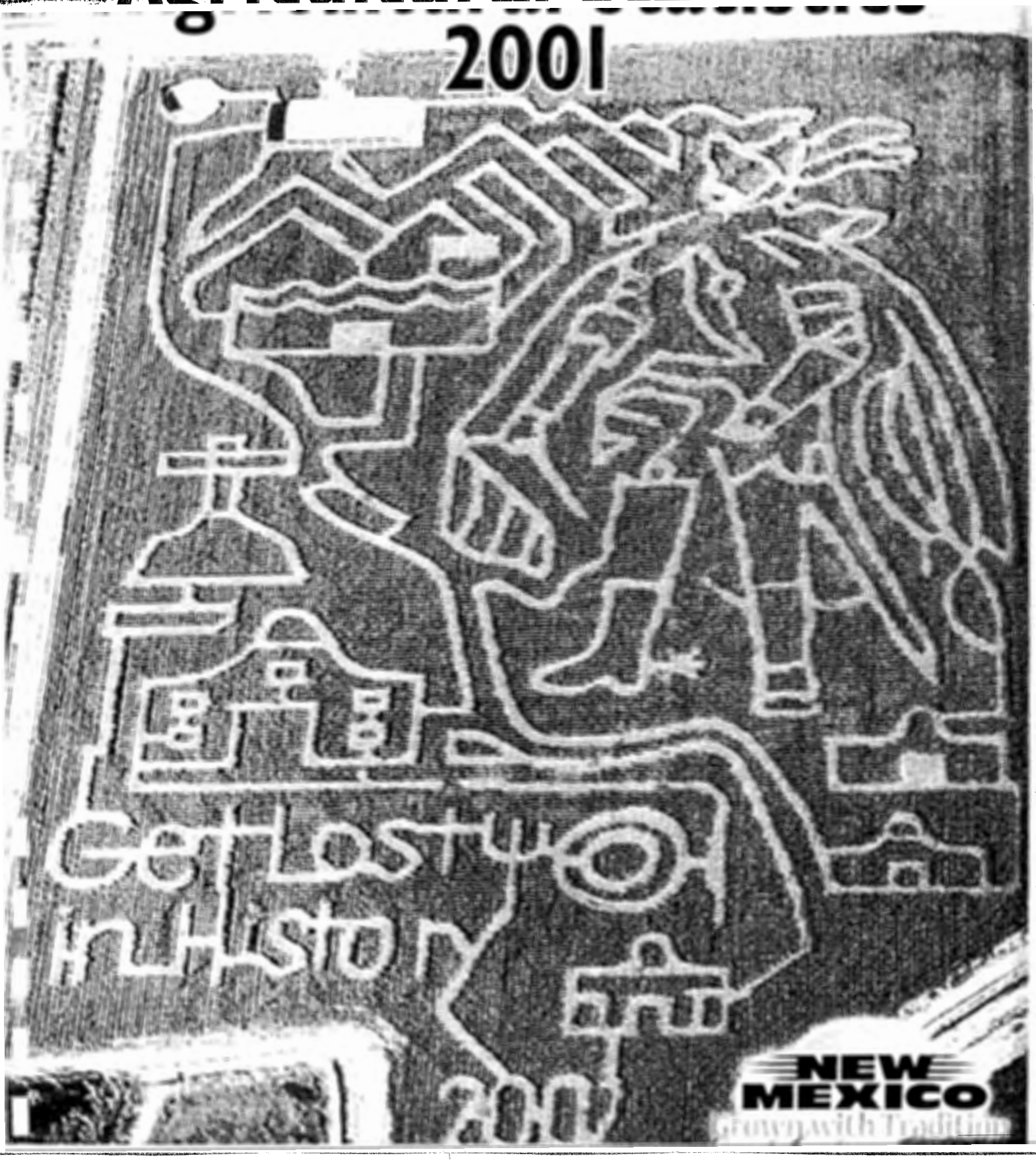
County	Chile Acres
Chaves	1,400
Dona Ana	4,200
Eddy	1,100
Hidalgo	2,200
Lea	800
Luna	6,200
Sierra	700
Socorro	300
Total	**16,900**

Calculation of anticipated acreage needing treatment. The following table shows 50 percent of the above acres for all counties.

County	Chile Acres
Chaves	700
Dona Ana	2,100
Eddy	550
Hidalgo	1,100
Lea	400
Luna	3,100
Sierra	350
Socorro	150
Total	**8,450**

This calculated value of anticipated total acreage needing treatment assumes that up to 50 percent of the planted chile acres in new Mexico in 2003 could require treatment for powdery mildew.

New Mexico Agricultural Statistics 2001



NEW MEXICO AGRICULTURAL STATISTICS 2001

Prepared By

United States Department of Agriculture
New Mexico Agricultural Statistics Service
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FRONT COVER

Photo Courtesy of
LA UNION MAZE
'Get Lost in History'
La Union, NM

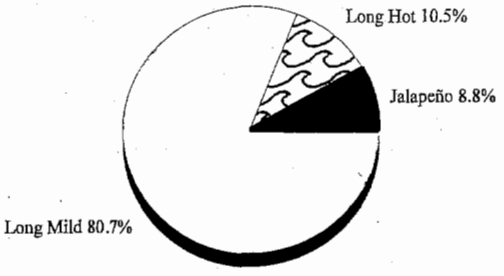
Chile: Acreage, Yield, and Production by County

County	Acreage Harvested			Yield Per Acre (Tons)			Production (Tons)[1/]		
	1999	2000	2001	1999	2000	2001	1999	2000	2001
Chaves	1,500	1,400	1,400	2.7	3.5	3.5	4,050	4,900	4,900
Doña Ana	4,000	4,900	4,200	2.6	5.6	5.0	10,400	27,440	21,000
Eddy	500	1,100	1,100	1.2	1.6	1.6	600	1,760	1,800
Hidalgo	1,250	2,600	2,200	5.1	5.9	6.0	6,375	15,210	13,200
Lea	1,000	700	800	1.5	1.6	2.0	1,500	1,120	1,600
Luna	6,500	6,500	6,200	5.1	6.5	5.3	33,260	42,540	32,900
Sierra	600	700	700	1.7	4.4	4.0	1,020	3,080	2,800
Socorro	200	300	300	2.9	4.5	4.0	580	1,350	1,200
Other Counties[2/]	650	800	800	1.5	2.0	2.0	1,300	1,600	1,600
STATE	**16,200**	**19,000**	**17,700**	**3.6**	**5.2**	**4.6**	**59,085**	**99,000**	**81,000**

[1/] Includes both dry and green tonnage combined. (See footnote #2 in previous table).
[2/] Other Counties include Bernalillo, Guadalupe, Grant, Otero, Quay, Rio Arriba, Roosevelt, Sandoval, San Juan, Santa Fe, and Valencia.

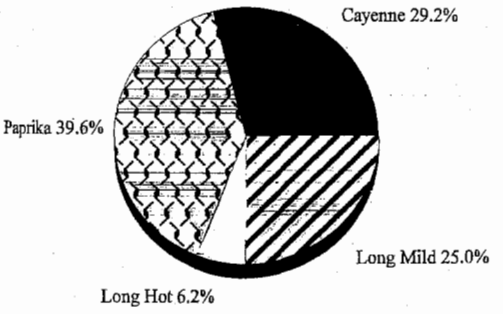
Green Chile Production, 2001

Wet Weight



Red Chile Production, 2001

Dry Weight [1/]



[1/] An 8:1 drying ratio was used to convert cayenne production to a dry weight.

DP BARCODE: D290167

CASE: 296124 DATA PACKAGE RECORD DATE: 05/20/03
SUBMISSION: S635159 BEAN SHEET Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: EMERGENCY EXEMP ACTION: 510 SEC18-OC F/F USE
RANKING : 0 POINTS ()
CHEMICALS: 128857 Myclobutanil (ANSI) %

ID#: 03NM0005
COMPANY:
PRODUCT MANAGER: 05 ROBERT FORREST 703-308-9376 ROOM: CM2 248
PM TEAM REVIEWER: BARBARA MADDEN 703-305-6463 ROOM: CM2 278
RECEIVED DATE: 05/13/03 DUE OUT DATE: 07/02/03

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 290167 EXPEDITE: N DATE SENT: 05/20/03 DATE RET.: / /
CHEMICAL: 128857 Myclobutanil (ANSI)
DP TYPE: 001
CSF: N LABEL: Y

ASSIGNED TO	DATE IN	DATE OUT
DIV : EFED	5/21/03	/ /
BRAN: ERB3	5/21/03	/ /
SECT: ID	5/21/03	/ /
REVR : Kevin Costello	5/21/03	/ /
CONTR:	/ /	/ /

ADMIN DUE DATE: 06/09/03
NEGOT DATE: / /
PROJ DATE: / /

* * * DATA REVIEW INSTRUCTIONS * * *

Attached is a specific emergency exemption request from New Mexico (03-NM-05) for the use of myclobutanil for control of powdery mildew in peppers. This is the seventh year the state has requested this use. Please assess the environmental risks associated with this use and indicate whether there are concerns for non-target organisms, especially endangered/threatened species. If EFED has concerns for the proposed use please provide labeling restrictions or mitigation measures if available. Note, EFED is currently reviewing a similar request from California (03-CA-15, D289700)

A tolerance for this use has been established so drinking water estimates for an human health aggregate risk assessment are not needed.

Please let me know if you need any additional information.

Thank you

Barbara Madden
305-6463

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

DP BARCODE: D290167

CASE: 296124 DATA PACKAGE RECORD (CONTINUED) DATE: 05/20/03
SUBMISSION: S635159 BEAN SHEET

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
290166		05/20/03	06/09/03	Y	N	Y